

International Journal Of Mechanical Engineering And

We are glad to present the 34th volume of International Journal of Engineering Research in Africa to our readers. This volume contains articles describing the research results in the fields of materials science in the mechanical engineering, construction materials, technological processes in the chemical production, power distribution, communication engineering and engineering management. The articles will be useful for many engineers as well as for academic teachers and students majoring in these fields of engineering science.

The 31st volume of the International Journal of Engineering Research in Africa presents the articles that describe the results of engineering research and solutions in the fields of applied mechanics, research of materials and processing technologies in the mechanical engineering, construction materials, equipment design, process control in chemical production, geoenvironmental engineering and engineering management. The articles will be useful for the professionals concerned with mechanical engineering, materials science, chemical engineering, engineering management as well as for academic teachers and students majoring in related fields.

We present to our readers the 45th volume of "International Journal of Engineering Research in Africa". This volume contains articles reflecting the research results in the fields of materials science, applied mechanics and mechanical engineering, ergonomics and optimization of technological parameters, power distribution and power efficiency, control, faults diagnosis and industrial engineering. The articles will be useful for many engineers as well as for academic teachers and students majoring in these fields of engineering science.

The International Journal of Mechanical Engineering Education International Journal of Manufacturing, Materials, and Mechanical Engineering, Vol 2 ISS 3IGI Publishing International Journal of Manufacturing, Materials, and Mechanical Engineering International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME). International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME) Volume 3, Issue 4 International Journal of Mechanical Engineering Serials Publications International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME). July - September 2014. Volume 4, Issue 3 International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME). January - March 2014. Volume 4, Issue 1 International Journal of Mechanical Engineering and Materials Sciences Serials Publications International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME) Volume 7: to 10; Pages:11 to 20; Pages:21 to 30; Pages:31 to 40; Pages:41 to 50; Pages:51 to 60; Pages:61 to 70; Pages:71 to 77 International Journal of Surface Engineering and Interdisciplinary Materials Science (IJSEIMS). International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME). April - June 2014. Volume 4, Issue 2 International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME) Volume 6, Issue 1: to 10; Pages:11 to 20; Pages:21 to 30; Pages:31 to 40; Pages:41 to 50; Pages:51 to 60; Pages:61 to 70; Pages:71 to 80; Pages:81 to 89

We present to our readers the 36th volume of the International Journal of Engineering Research in Africa. This volume contains articles describing the results of engineering research and technical solutions in the fields of the applied mechanics, research of materials and processing technologies in the mechanical engineering, construction materials, optimization of reactive power dispatch, technological processes in the chemical and food production, environmental engineering and engineering management. The articles will be useful for the professionals concerned with mechanical engineering, materials science, chemical engineering, power production and engineering management as well as for academic teachers and students majoring in these fields of engineering science.

This book presents the select proceedings of the International Conference on Recent Advancements in Mechanical Engineering (ICRAME 2020). It provides a comprehensive overview of the various technical challenges faced, their systematic investigation, contemporary developments, and future perspectives in the domain of mechanical engineering. The book covers a wide array of topics including fluid flow techniques, compressible flows, waste management and waste disposal, bio-fuels, renewable energy, cryogenic applications, computing in applied mechanics, product design, dynamics and control of structures, fracture and failure mechanics, solid mechanics, finite element analysis, tribology, nano-mechanics and MEMS, robotics, supply chain management and logistics, intelligent manufacturing system, rapid prototyping and reverse engineering, quality control and reliability, conventional and non-conventional machining, and ergonomics. This book can be useful for students and researchers interested in mechanical engineering and its allied fields.

We present for our readers the 33rd volume of the International Journal of Engineering Research in Africa which contains articles describing the results of engineering research and solutions in the fields of the applied mechanics, research of materials and processing technologies in the mechanical engineering, construction materials and technologies, equipment design, power electronics, power distribution, technological processes in the chemical production, environmental engineering and engineering management. The articles will be useful for the professionals concerned with mechanical engineering, materials science, chemical engineering, power production and engineering management as well as for academic teachers and students majoring in these fields of engineering science.

This volume of the journal contains papers which were presented at the International Conference on Green Trends in Mechanical Engineering Sciences (ICGTMES) that was held on October 3-5, 2018, Karnataka, India. The focus of the conference was to open a new paradigm to deliberate on eco-friendly and robust design, use of materials with less

environmental impact, use of fewer materials, optimal utilization of resources during manufacturing processes. We hope that the presented papers will be interesting and useful for many specialists in the field of mechanical engineering and materials science.

The 48th volume of "International Journal of Engineering Research in Africa" is presented to your attention. The included papers are reflecting the research results in the fields of materials science, applied mechanics and mechanical engineering, power engineering, power efficiency, control, mechatronics, communication and industrial engineering. The proposed scientific articles can be useful for the majority of engineers as well as for academic teachers and students majoring in the mentioned fields of engineering science. Issues in Mechanical Engineering / 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Mechanical Engineering. The editors have built Issues in Mechanical Engineering: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Mechanical Engineering in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Mechanical Engineering: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

Differential Transformation Method for Mechanical Engineering Problems focuses on applying DTM to a range of mechanical engineering applications. The authors modify traditional DTM to produce two additional methods, multi-step differential transformation method (Ms-DTM) and the hybrid differential transformation method and finite difference method (Hybrid DTM-FDM). It is then demonstrated how these can be a suitable series solution for engineering and physical problems, such as the motion of a spherical particle, nanofluid flow and heat transfer, and micropolar fluid flow and heat transfer. Presents the differential transformation method and why it holds an advantage over higher-order Taylor series methods Includes a full mathematical introduction to DTM, Ms-DTM, and Hybrid DTM Covers the use of these methods for solving a range of problems in areas such as nanofluid flow, heat transfer, and motion of a spherical particle in different conditions Provides numerous examples and exercises which will help the reader fully grasp the practical applications of these new methods

The International Journal of Manufacturing, Materials, and Mechanical Engineering (IJMMME) is a refereed, interdisciplinary journal that publishes high quality articles with special emphasis on research and development in manufacturing, materials and mechanical engineering. IJMMME provides discussion and the exchange of information on all important aspects of classical and modern mechanical engineering. In addition, IJMMME covers all sustainable development aspects related with manufacturing, materials, and mechanical engineering.

Technological Developments in Networking, Education and Automation includes a set of rigorously reviewed world-class manuscripts addressing and detailing state-of-the-art research projects in the following areas: Computer Networks: Access Technologies, Medium Access Control, Network architectures and Equipment, Optical Networks and Switching, Telecommunication Technology, and Ultra Wideband Communications. Engineering Education and Online Learning: including development of courses and systems for engineering, technical and liberal studies programs; online laboratories; intelligent testing using fuzzy logic; taxonomy of e-courses; and evaluation of online courses. Pedagogy: including benchmarking; group-learning; active learning; teaching of multiple subjects together; ontology; and knowledge management. Instruction Technology: including internet textbooks; virtual reality labs, instructional design, virtual models, pedagogy-oriented markup languages; graphic design possibilities; open source classroom management software; automatic email response systems; tablet-pcs; personalization using web mining technology; intelligent digital chalkboards; virtual room concepts for cooperative scientific work; and network technologies, management, and architecture. Coding and Modulation: Modeling and Simulation, OFDM technology, Space-time Coding, Spread Spectrum and CDMA Systems. Wireless technologies: Bluetooth, Cellular Wireless Networks, Cordless Systems and Wireless Local Loop, HIPERLAN, IEEE 802.11, Mobile Network Layer, Mobile Transport Layer, and Spread Spectrum. Network Security and applications: Authentication Applications, Block Ciphers Design Principles, Block Ciphers Modes of Operation, Electronic Mail Security, Encryption & Message Confidentiality, Firewalls, IP Security, Key Cryptography & Message Authentication, and Web Security. Robotics, Control Systems and Automation: Distributed Control Systems, Automation, Expert Systems, Robotics, Factory Automation, Intelligent Control Systems, Man Machine Interaction, Manufacturing Information System, Motion Control, and Process Automation. Vision Systems: for human action sensing, face recognition, and image processing algorithms for smoothing of high speed motion. Electronics and Power Systems: Actuators, Electro-Mechanical Systems, High Frequency Converters, Industrial Electronics, Motors and Drives, Power Converters, Power Devices and Components, and Power Electronics.

This e-book is a compilation of papers presented at the Mechanical Engineering Research Day 2017 (MERD'17) - Melaka, Malaysia on 30 March 2017.

We present our readers with the 42nd volume of "International Journal of Engineering Research in Africa". This volume contains articles describing the research results in the fields of materials science, applied mechanics, mechanical engineering, power distribution and power efficiency, construction materials and technologies, biodiesel production, information technologies, and industrial engineering. The articles will be useful for many engineers as well as for academic teachers and students majoring in these fields of engineering science.

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